**Montana Fish, Wildlife & Parks**

FF

April 2, 2002
1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
Fisheries Division
Endangered Species Coordinator
Great Falls Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Helena Ranger District, 2001 Poplar, Helena, MT 59601
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, 100 North Park, Suite 320, Helena, MT 59601
State Historic Preservation Office, Helena
Pat Barnes Chapter Trout Unlimited, 805 Mill Road, Helena, MT 59601
Mr. Wayne Effertz, Lewis and Clark County Public Works, 3402 Cooney Drive, Helena, MT 59602
Mark Ryckman, 619 West Bayard, East Helena, MT 59635
M.L. Ryckman, 1515 Grizzly Gulch, Helena, MT 59601
Ada and Harvey Harlen, 1600 Winne Ave., Helena, MT 59601
Bill Christenson, 6815 Beaver Creek Road, Helena, MT 59602
Tom Weiss, 709 South California, Helena, MT 59601
Victor and Robert Christianson, 6854 Beaver Creek Road, Helena, MT 59602
Caroline Ham, 7890 Hoge Drive, Helena, MT 59602
Jane Butkay, P.O. Box 27, Rollins, MT 59931
Caroline and Jerry Travis, 1484 Old Barnwood Ave., Zachary, LA 70791
Roy Collishaw, 969 Caribbean Drive, Sunnyvale, CA 94089

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for a Future Fisheries Project tentatively planned to re-connect a small irrigation ditch directly back into Beaver Creek to help preserve surface flows in this important stream. Beaver Creek is an important spawning tributary for rainbow trout residing in the Missouri River and Holter Reservoir. This proposed project is located on the Helena National Forest near the community of Nelson in Lewis and Clark County.

Please submit any comments that you have by 5:00 P.M., May 4, 2002 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
e-mail: mlere@state.mt.us

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Beaver Creek Ditch Re-Connection Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 that directs the Department to administer a Future Fisheries Improvement Program. The program involves physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. This project is being proposed to re-connect a small irrigation ditch directly back into Beaver Creek to help preserve surface flows in this important stream. Beaver Creek is a tributary of the Missouri River that provides important spawning and rearing habitat for rainbow trout that reside in the Missouri River and Holter Reservoir. The diversion is located immediately upstream of the community of Nelson and is used to divert a small amount of water (about 1 cubic foot per second - cfs) from Beaver Creek to irrigate the yards of the three cabin owners at Nelson. Presently, this ditch terminates at a small meadow about 150 yards from the stream, with surface flow remaining unconnected with Beaver Creek. This proposed project is located near the community of Nelson in Lewis and Clark County (Attachment 1).

I. Location of Project: This project will be conducted on a small ditch on Beaver Creek located at the community of Nelson within Township 12 North, Range 2 West, Section 12 in Lewis and Clark County.

II. Need for the Project: One goal within Montana Fish, Wildlife and Parks six-year operations plan for the fisheries program is to "restore and enhance degraded habitats" by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on public and private lands. This proposed project would help achieve this goal.

Currently, a small ditch is used to divert water (about 1 cfs) out of Beaver Creek to irrigate the yards of three cabin owners within the community of Nelson. The unused portion of the diverted flow never re-connects with the creek and simply drains into a meadow located about 150 yards from the stream. The water drained into the meadow never makes it to Beaver Creek as surface flow and is either lost to evapo-transpiration or simply infiltrates into the ground. Beaver Creek is an important spawning tributary for rainbow trout that reside in the Missouri River and Holter Reservoir. In drought years, stream flow in Beaver Creek can become critically low. The water salvaged from this ditch would provide significant benefits to the stream during these dry years.

III. Scope of the Project:

The project proposes to return irrigation flow back into Beaver Creek by extending the existing ditch approximately 200 feet to the county road and then installing a 50 foot, 18 inch ID culvert underneath the road to re-connect the ditch with the stream (Attachment 2). Re-connecting the ditch to the stream would create approximately 1 cfs of salvaged water to the lower 4.5 miles of Beaver Creek. This project is expected to cost $2,500.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $1,500.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

The addition of 1 cfs of salvaged water to the lower 4.5 miles of Beaver Creek would be expected to benefit both resident and migratory trout populations and improve overall aquatic habitat, especially during years of below normal stream flow.

2. Water quantity, quality and distribution.

To minimize turbidity, all construction activity will occur in the dry when the diversion is shut down. Short-term increases in turbidity will occur, however, when water is diverted into the newly re-connected ditch. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota. A 124 permit (Stream Protection Act) will be obtained from Montana Fish, Wildlife and Parks.

3. Geology and soil quality, stability and moisture.

Soils within the immediate project area would be disturbed during construction, but would be stabilized with re-vegetation efforts (sowing seed).

4. Vegetation cover, quantity and quality.

Sods would be disturbed within the immediate project area during the period of construction. However, proposed re-vegetation efforts would act to mitigate these disturbances.

5. Aesthetics

Aesthetics of the site would be degraded during the short time frame of construction due to the presence of heavy equipment and ground disturbance. Long-term impacts to aesthetics would be negligible.

9. Historic and archaeological sites

The State Historic Preservation Office will be contacted to determine the need for compliance with the federal historic preservation regulations. The project will not begin until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

Beaver Creek is an important spawning tributary for rainbow trout residing in the Missouri River and Holter Reservoir. This proposed project is expected to enhance both resident and migratory trout populations and is expected to improve fishing opportunities in Beaver Creek, the Missouri River and Holter Reservoir.

10. Demands on government services.

Installation of a new culvert under the county road at Nelson will require an encroachment permit from Lewis and Clark County. The project will not begin until an encroachment permit is issued by the county. One of the water rights holders on the ditch has agreed to ensure that the culvert remains functional when the ditch is operating and carrying water.

14. Transportation networks and traffic flows.

Traffic on the county road between Nelson and the bridge over Beaver Creek may be delayed for a brief period of time while the new culvert is installed. Local landowners will be notified about project timing several weeks in advance to minimize possible conflicts and traffic delays. Construction timing also will be noticed in the local newspaper prior to installation of the culvert to minimize potential conflict with traffic.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, the water diverted from Beaver Creek will continue to be drained into a meadow and will be lost to surface flow via evapo-transpiration and infiltration into the ground. As such, the potential benefit of returning approximately 1 cfs of surface flow for return to Beaver Creek would not be realized.

2. Develop an alternative irrigation system for the users

Water rights holders on the ditch are not willing to change to a pump irrigation system due to concerns over added power costs and the increased need for maintenance.

3. The Proposed Alternative

The proposed alternative calls for returning approximately 1 cfs of diverted flow from Beaver Creek by connecting the terminal end of an existing ditch back to Beaver Creek. Beaver Creek is an important spawning tributary for rainbow trout residing in the Missouri River and Holter Reservoir. This salvaged water would provide stream flow benefits to the lower 4.5 miles of Beaver Creek.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also was reviewed and approved by the Fish, Wildlife and Parks Commission during their March 21 public meeting. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA will be published on Montana Fish, Wildlife and Parks web page: fwp.state.mt.us.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on May 4, 2002.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue
Helena, MT 59620

Telephone: (406) 444-2432
e-mail: mlere@state.mt.us

**MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS**
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701
(406) 444-2535

# ENVIRONMENTAL ASSESSMENT

Project Title Beaver Creek Ditch Re-connection Project

Division/Bureau Fisheries Division -Future Fisheries Improvement

Description of Project The project is being proposed to re-connect a small irrigation ditch directly back into Beaver Creek to help preserve surface flows in this important stream. The project site is located on the Helena National Forest near the community of Nelson in Lewis and Clark County.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

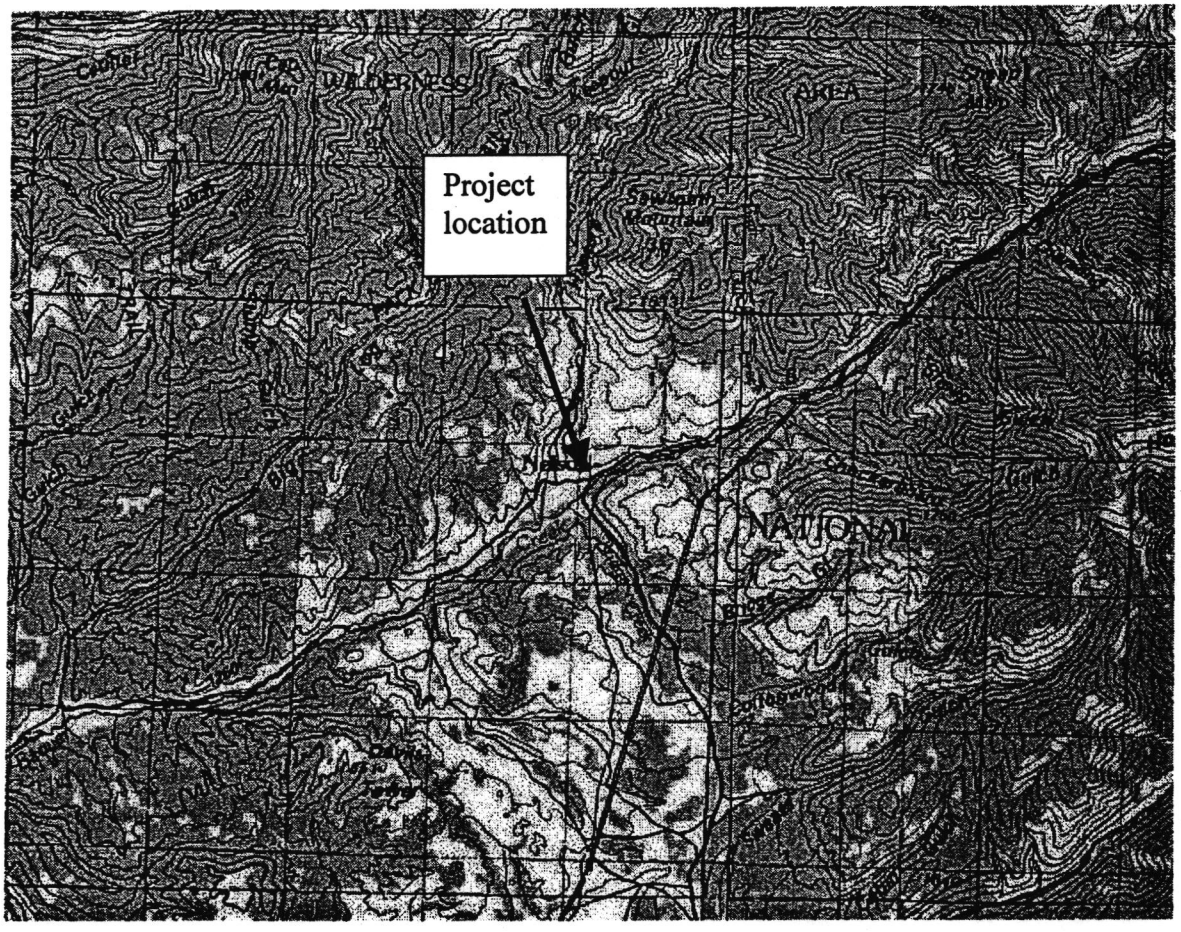
| | MAJOR | MODERATE | MINOR | NONE | UNKNOWN | COMMENTS ON ATTACHED PAGES |
|---|---|---|---|---|---|---|
| 1. Terrestrial & aquatic life and habitats | | | X | | | X |
| 2. Water quality, quantity & distribution | | | X | | | X |
| 3. Geology & soil quality, stability & moisture | | | X | | | X |
| 4. Vegetation cover, quantity & quality | | | X | | | X |
| 5. Aesthetics | | | X | | | X |
| 6. Air quality | | | | X | | |
| 7. Unique, endangered, fragile, or limited environmental resources | | | | X | | |
| 8. Demands on environmental resources of land, water, air & energy | | | | X | | |
| 9. Historical & archaeological sites | | | | X | | X |

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

| | MAJOR | MODERATE | MINOR | NONE | UNKNOWN | COMMENTS ON ATTACHED PAGES |
|---|---|---|---|---|---|---|
| 1. Social structures & mores | | | | X | | |
| 2. Cultural uniqueness & diversity | | | | X | | |
| 3. Local & state tax base & tax revenue | | | | X | | |
| 4. Agricultural or industrial production | | | | X | | |
| 5. Human health | | | | X | | |
| 6. Quantity & distribution of community & personal income | | | | X | | |
| 7. Access to & quality of recreational and wilderness activities | | | X | | | X |
| 8. Quantity & distribution of employment | | | | X | | |
| 9. Distribution & density of population & housing | | | | X | | |
| 10. Demands for government services | | | X | | | X |
| 11. Industrial & commercial activity | | | | X | | |
| 12. Demands for energy | | | | X | | |
| 13. Locally adopted environmental plans & goals | | | | X | | |
| 14. Transportation networks & traffic flows | | | X | | | X |

Other groups or agencies contacted or which may have overlapping jurisdiction Helena National Forest, Lewis and Clark County, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office

Individuals or groups contributing to this EA None
Recommendation concerning preparation of EIS No EIS required.
EA prepared by: Mark Lere
Date: March 21, 2002




**Attachment 1. Location of the proposed Future Fisheries Improvement project on a small Beaver Creek diversion near Nelson.**

ATTACHMENT 2

**Schematic of proposed project located on Beaver Creek.**